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PATENT**R marks**

Entry of the foregoing amendments and reconsideration of this application is requested. By this amendment, claim 36 has been amended to more specifically set forth the invention. Claims 84-103 have been withdrawn from consideration. Claims 64-83 were previously withdrawn. Claims 36-63 remain pending in the application.

Election/Restriction

The Examiner has constructively elected Group I, corresponding to claims 36-63 and has withdrawn claim 84-103 from consideration in accordance with 37 C.F.R. § 1.142(b) and MPEP §821.03.

In keeping with the Examiner's action, the applicants hereby confirm this action and formally elect Group I, including claims 36-63, drawn to an integrated device for performing biochemical analysis, classified in class 422, subclass 68.1, and hereby withdraw Group II, claims 84-103, drawn to a method of making an integrated device formed via the sintering together of green sheet layers, classified in class 438, subclass 14, without prejudice. The withdrawn claims will be retained for the filing of a divisional application at a later time.

Claims 64-83 were previously withdrawn. Claims 36-63 remain pending in this application.

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PATENT**Claims Rejections – 35 U.S.C. § 112**

The Examiner has rejected claims 36-63 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner states that claim 36, an apparatus claim, cannot be dependent upon method claim 84 because this circular claim dependency renders claim 36 and dependent claims 37-63 indefinite.

In response, the applicant has amended claim 36 to state, "A device having a plurality of well structures for the parallel processing of a plurality of independently controlled molecular reactions and at least one of: a heating element, cooling element and temperature monitoring element associated with each well structure, said device further comprising:....."

It is believed that this amendment to claim 36, which places claim 36 in independent form overcomes the 35 U.S.C. 112 rejection. Notice to that effect is requested.

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PATENT**35 U.S.C. 103 Rejection**

The Examiner has rejected claims 36-41, 49-52, 54, 56, 58-60, and 62-63 under 35 U.S.C. 103(a) as being unpatentable over Hayes et al, U.S. Patent No. 5,849,208, hereinafter referred to as Hayes, in view of Briscoe et al., U.S. Patent No. 6,544,734. The Examiner in making this rejection states that Hayes teaches a device comprising: a plurality of well structures for the parallel processing of a plurality of molecular reactions; a cooling element; and a temperature monitoring element associated with each well structure. The Examiner admits that Hayes does not teach a device fabricated as a substantially monolithic structure using green sheets. The Examiner states that Briscoe teaches the use of green sheets in the fabrication of a device, wherein the device may be used with a polymerase chain reaction in the analysis of samples containing DNA fragments. Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art to incorporate the method of making an integrated monolithic device using green sheets, as taught by Briscoe, in the fabrication of the device used for performing and analyzing the results of a polymerase chain reaction, as taught by Hayes. Applicants respectfully disagree with this rejection.

The Examiner has additionally rejected claims 42, 43, and 55 under 35 U.S.C. 103(a) as being unpatentable over Hayes, in view of Briscoe as applied above, and further in view of Anderson et al., U.S. Patent No. 6,168,948, hereinafter referred to as Anderson. Applicants respectfully disagree with this rejection.

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The Examiner has additionally rejected claims 44 and 57 under 35 U.S.C. 103(a) as being unpatentable over Hayes, in view of Briscoe as applied above, and further in view of Mathies et al., U.S. Patent No. 6,132,580, hereinafter referred to as Mathies. Applicants respectfully disagree with this rejection.

The Examiner has additionally rejected claims 45, 46, and 61 under 35 U.S.C. 103(a) as being unpatentable over Hayes, in view of Briscoe as applied above, and further in view of Garner et al., U.S. Patent No. 5,241,363, hereinafter referred to as Garner. Applicants respectfully disagree with this rejection.

The Examiner has additionally rejected claims 47, 48, and 53 under 35 U.S.C. 103(a) as being unpatentable over Hayes, in view of Briscoe as applied above, and further in view of Christel et al., U.S. Patent No. 6,369,893, hereinafter referred to as Christel. Applicants respectfully disagree with this rejection.

The applicant asserts that in order to establish a *prima facie* case of obviousness under 35 U.S.C. §103, three basic criteria must be met: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; (2) there must be a reasonable expectation of success; and (3) the prior art reference (or references when

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combined) must teach or suggest all of the claim limitations. See MPEP §2143; *emphasis added*.

With respect to the first requirement under MPEP §2143, the applicant asserts that the pending Action fails to provide a reasoned basis for the suggestion or motivation to combine the disclosure of Hayes with that of Briscoe, or the disclosure of Hayes with that of Briscoe and that of any other knowledge or teaching of record. For example, the disclosures of Hayes and Briscoe do not suggest, either alone or in combination, "a substantially monolithic device structure wherein [the] plurality of well structures are define within material comprising a plurality of green sheet layer [...] and said substantially monolithic structure further comprises thermally insulating material separating [the] well structures". See, for example, Applicant's claim 36.

The applicants respectfully state that the combination of references is not correct and would not have been combined by an ordinary person skilled in the art to develop Applicants' invention. The applicants assert that there is no teaching, nor is it obvious, to make the combination of Hayes with the teaching of Briscoe. Moreover, nowhere in the Hayes or Briscoe references is there any appreciation that thermally conducting or insulating materials separating the well structures may be exploited to provide greater discrete array element reaction control as disclosed in accordance with Applicants' instant invention. Accordingly, the combination of Hayes and Briscoe purportedly motivated by common knowledge cannot be said to

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disclose each and every element of Applicants' claims under the third requirement of MPEP §2431.

Notwithstanding the preceding, Applicants would also point out for the Examiner's consideration that "[w]ith respect to core factual findings in a determination of patentability, [the Office] cannot simply reach conclusions based on its own understanding or experience – or on its assessment of what would be basic knowledge or common sense [...] rather, the [Office] must point to some concrete evidence in the record in support of [the] findings." *See, In re Zurko*, 258 F.3d 1379, 59 USPQ2d (BNA) 1693 (2001); *emphasis added*. Moreover, "deficiencies of the cited references [to support a determination of obviousness] cannot be remedied by the [Office's] general conclusions about what is 'basic knowledge' or 'common sense' to one of ordinary skill in the art." *Ibid*; *emphasis added*. Applicants therefore respectfully request that the Examiner withdraw the §103 rejection of claim 36 as amended.

The applicants believe that independent claim 36 is now in a condition for allowance in light of the amendments and remarks made herein. Accordingly, the applicants believe that claims 37-63 are also in a condition for allowance in that they ultimately depend from claim 36 respectively. Notice to that effect is requested.

No amendment made herein was related to the statutory requirements of patentability unless expressly states; rather any amendment not so identified may

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be considered as directed *inter alia* to clarification of the structure and/or function of the invention and Applicants' best mode for practicing the same. Additionally, no amendment made herein was presented for the purpose of narrowing the scope of any claim, unless Applicant has argued that such amendment was made to distinguish over a particular reference or combination of references. Furthermore, no election to pursue a particular line of argument was made herein at the expense of precluding or otherwise impeding Applicants from raising alternative lines of argument later during prosecution. Applicants' failure to affirmatively raise specific arguments is not intended to be construed as an admission to any particular point raised by the Examiner.

The Applicant believes that the subject application, is in condition for allowance. Such action is earnestly solicited by the Applicant. In the event that the Examiner deems the present application non-allowable, it is requested that the Examiner telephone the Applicant's attorney or agent at the number indicated below so that the prosecution of the present case may be advanced by the clarification of any continuing rejection.

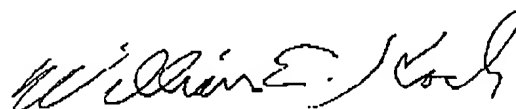
SUMMARY: Reconsideration is respectfully requested. In view of the foregoing amendments and remarks it is believed that the application, including claims 36-63, is now in condition for allowance. Notice to that effect is respectfully requested.

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Applicant respectfully requests a one month extension of time under 37 CFR 1.136(a). The extension fee associated with the action as outlined in 37 1.17(a) is provided in the fee transmittal provided herewith.

Authorization is hereby given to charge any fees necessitated by actions taken herein, including any extension of time fees, to Deposit Account 502117.

Respectfully submitted,



SEND CORRESPONDENCE TO:

MOTOROLA, INC.
Law Department
Customer Number: 23330

William E. Koch
Attorney for Applicant
Reg. No. 29,659
Tel. (602) 952-3486